

Adolescents and Young Adults

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Introduction

The proportion of people diagnosed with HIV infection in Massachusetts who are adolescents is lower than observed on the national level. Within Massachusetts, HIV infection among adolescents varies by gender, race/ethnicity and geography. Regarding gender, 11% (N=92) of females diagnosed with HIV infection within the three-year period 2002 to 2004 were between the ages of 13 and 24 years old compared to 7% of males. Among Hispanic and black (non-Hispanic) individuals diagnosed with HIV infection during this time period, 9% were adolescents compared to 7% of white (non-Hispanic) individuals. Additionally, within certain Massachusetts communities the proportion of adolescents among recent HIV infection diagnoses is 2 or 3 times the statewide proportion of 8%. The following describes adolescents and young adults recently diagnosed with HIV infection and those living with HIV/AIDS in Massachusetts.

General Statistics:

- Within the three-year period 2002 to 2004, 225 adolescents (age 13-24 years) were diagnosed with HIV infection, accounting for 8% of all diagnoses reported in Massachusetts.
- On December 31, 2004, 357 (2%) people living with HIV/AIDS were 13-24 years old. Of people living with HIV/AIDS in Massachusetts, 1,446 (10%) were diagnosed with HIV infection at ages 13-24 years.

Regional Distribution:

Among Health Service Regions (HSRs), the Western and Boston HSRs have the largest proportions of adolescents among persons diagnosed with HIV infection within the three-year period 2002 to 2004 at 10% and 8% of diagnoses, respectively.

Within the three-year period 2002 to 2004, the city of Boston had the largest number of people diagnosed with HIV infection at ages 13-24 years at 67 (9% of HIV infections diagnosed).

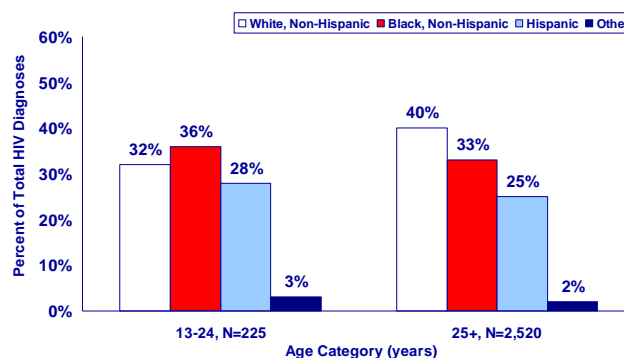
Among cities with over 20 people diagnosed with HIV infection within the three-year period 2002 to 2004, the following have the highest proportions diagnosed during adolescence (N=number of adolescents diagnosed):

• Chicopee	23%	(N=5)
• Medford	13%	(N=4)
• Lawrence	12%	(N=8)
• Holyoke	11%	(N=5)
• Chelsea	11%	(N=4)

Race and Ethnicity:

- Among adolescents diagnosed with HIV infection within the three-year period 2002 to 2004, 28% are Hispanic, compared to 25% of people diagnosed at age 25 years or above.
- Among adolescents living with HIV/AIDS on 12/31/04, 35% are Hispanic, compared to 24% of people 25 years or older.

Figure 1. People Diagnosed with HIV Infection Within the Years 2002 to 2004 by Age at HIV Diagnosis and Race/Ethnicity: Massachusetts

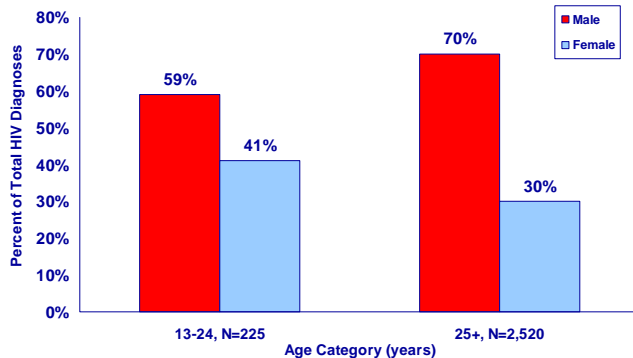


Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/05

Gender:

- Adolescents diagnosed with HIV infection within the three-year period 2002 to 2004 were 59% male and 41% female. In contrast, 70% of people diagnosed with HIV infection at age 25 years or above are male and 30% are female.

Figure 2. People Diagnosed with HIV Infection Within the Years 2002 to 2004 by Age at HIV Diagnosis and Gender: Massachusetts



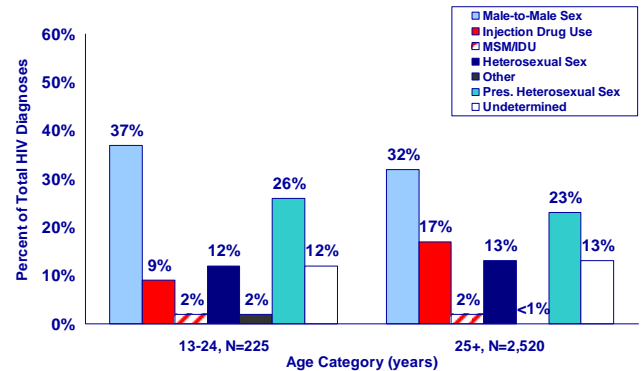
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/05

- Among individuals living with HIV/AIDS who were ages 13-24 years on 12/31/04, 46% are female, compared to 28% of those age 25 years and older.

Exposure Mode:

- A greater proportion of adolescents recently diagnosed with HIV infection were exposed through male-to-male sex, or presumed exposed through heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual) than people diagnosed at age 25 years or above. A smaller proportion was exposed through injection drug use and a similar proportion was exposed through heterosexual sex with partners with known risk and HIV status.

Figure 3. People Diagnosed with HIV Infection Within the Years 2002 to 2004 by Age at HIV Diagnosis and Mode of Exposure: Massachusetts



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/05

- Among individuals living with HIV/AIDS who were ages 13-24 years on 12/31/04, a greater proportion were pediatric exposures to HIV compared to people age 25 years and older (38% vs. <1%). Smaller proportions were exposed through injection drug use (5% vs. 29%) and male-to-male sex (21% vs. 33%).

Perinatal and Pediatric Exposure to HIV Infection Among Adolescents:

- Among 278 children and young adults living with HIV/AIDS who were exposed to HIV perinatally or through other means at age 13 and under, 147 (57%) are currently age 13-24 years old.

Of these 147 individuals:

- Fifty-four percent are male and 46% are female
- Forty-five percent are black (non-Hispanic), 31% are Hispanic, and 22% are white (non-Hispanic).

Exposure Mode and Gender:

- A higher proportion of adolescent males (age 13-24 years) diagnosed with HIV infection within the three-year period 2002 to 2004 were exposed to HIV through male-to-male sex than men age 25 years and above (62% vs. 45%). Conversely, a lower proportion was exposed through injection drug use (10% among 13-24 year olds vs. 16% among 25+ year olds).

- A larger proportion of adolescent females (age 13-24 years) diagnosed with HIV infection within the three-year period 2002 to 2004 were presumed exposed to HIV through heterosexual sex with partners of unknown risk and HIV status (presumed heterosexual sex) than women age 25 years and above (48% vs. 42%). Conversely, a smaller proportion was exposed through injection drug use (9% among 13-24 year olds vs. 18% among 25+ year olds).

Exposure Mode and Race/Ethnicity:

- Exposure mode among people age 13-24 years diagnosed with HIV infection within the three-year period 2002 to 2004 varies by race/ethnicity.
- Among **white (non-Hispanic) adolescents**, male-to-male sex is the predominant exposure mode, attributed as exposures in 55%.
- Among **black (non-Hispanic) adolescents**, presumed heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual) is the predominant exposure mode at 46%.
- Among **Hispanic adolescents**, exposure mode is more evenly distributed with male-to-male sex accounting for 30% and injection drug use and heterosexual sex with partners with known risk and HIV status each accounting for 19% of exposures.

Adolescents at Risk of HIV infection

Behavioral Risk Factors: According to school-based behavioral surveys, adolescents in Massachusetts are engaging in behaviors that put them at risk for HIV infection.

- Among 3,624 high school-aged respondents to the 2003 Massachusetts Youth Risk Behavior Survey (MYRBS), 47% reported ever using an illegal drug, 8% reported ever using cocaine, 3% reported ever using heroin and 2% reported ever using a needle to inject drugs.
- Among sexually active respondents to the 2003 MYRBS, 25% used alcohol or drugs before last intercourse, and 15% did not use any form of birth control or were not sure if any birth control method had been used when they last had sex.

- Fewer youth in 2003 than in 1993 reported the following: lifetime sexual intercourse (from 49% in 1993 to 41% in 2003), four or more lifetime sexual partners (from 15% in 1993 to 10% in 2003), and sexual intercourse before age 13 (from 8% in 1993 to 5% in 2003).
- Among sexually active respondents to the 2003 MYRBS, 57% used a condom at last intercourse – an increase from 52% in 1993.

State Funded HIV Counseling and Testing:

- Of 45,825 HIV tests performed in 2004, 28% (N=13,002) were among 13-24 year olds, of which 0.4% were positive.

Data Sources:

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program, Data as of July 1, 2005

Youth Risk Behavior Survey Data: Massachusetts Department of Education, Youth Risk Behavior Survey

HIV Counseling and Testing Data: MDPH HIV/AIDS Bureau, Office of Research and Evaluation

Additional References of Interest:

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For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile," available online at www.mass.gov/dph/aids